

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Bis(tert-butylamino)silane**

FORMULA: C₈H₂₂N₂Si

CAS NO: 186598-40-3

SYNONYMS: BTBS, BTBAS

MANUFACTURER:

Wonik Materials North America
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IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC 1-703-741-5500

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SECTION 2 HAZARDS IDENTIFICATION

OSHA HAZARDS

Flammable, Corrosive

Pictogram



Signal Word

Danger

Hazard Statements

H226	Flammable liquid and vapour
H261	In contact with water releases flammable gas
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled

SECTION 2 HAZARDS IDENTIFICATION (Cont.)

Precautionary Phrases

Bis(tert-butylamino)silane

P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection
P231 + P232	Handle under inert gas. Protect from moisture.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P402 + P404	Store in a dry place in a closed container

HMIS CLASSIFICATION

Health: 3 Flammability: 3 Reactivity: 1

NFPA 704 RATINGS (SCALE 0-4):

Health: 3 Fire: 3 Reactivity: 1 Special: W

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: $C_8H_{22}N_2Si$

Molecular Weight: 174.36 g/mol

CHEMICAL NAME	CAS#	Concentration
Bis(tert-butylamino)silane	186598-40-3	100%

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: Immediately flush with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN EXPOSURE: Remove contaminated clothing. Immediately flush with plenty of water. Get medical attention.

INHALATION: Remove to fresh air. Give artificial respiration if not breathing. Oxygen may be given by qualified personal if breathing is difficult. Get immediate medical attention.

INGESTION: Get immediate medical attention. Do not induce vomiting. Rinse mouth with plenty of water.

SECTION 5 FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:

Dry chemical, carbon dioxide, or appropriate foam. For large fires, flood fire with water from a distance.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:

In the presence of air isobutylene, ammonia, nitrogen oxides, carbon monoxide, carbon dioxide, and silicon dioxide are thermal decomposition products.

ADVICE FOR FIRE FIGHTERS

Use positive pressure self-contained breathing apparatus (SCBA) and appropriate personal protective equipment (PPE).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

FLAMMABLE LIQUID. Vapors may travel considerable distances to a source of ignition and flashback. Contained vapors may cause a fire or explosion hazard. Emits toxic fumes under fire conditions. Water contact produces tert-butylamine, which is highly flammable and highly toxic.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Isolate hazard area. Eliminate moisture and sources of ignition. Wear positive pressure respirator and personal protective equipment.

ENVIRONMENTAL PRECAUTIONS:

Do not let product enter drains. Prevent further leakage or spillage if safe to do so.

METHODS AND MATERIALS:

Absorb spill with vermiculite or other inert absorbent. Place in appropriate chemical waste container.

SECTION 7 HANDLING AND STORAGE

PERSONNEL PRECAUTIONS

Keep away from moisture in a cool, well-ventilated area. When handling use appropriate personal protective equipment. Avoid breathing vapors and skin contact.

Bis(tert-butylamino)silane

CONDITIONS FOR SAFE STORAGE

Handle and store in a dry, inert environment. Store in a standard flammable liquids cabinet or room.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION:

Wear a full-face respirator with ammonia gas cartridges when the airborne concentration is known. When there is an emergency situation of the airborne concentration is unknown, wear a positive pressure air-supplied respirator.

EYE/FACE PROTECTION:

Wear approved chemical safety goggles or safety glasses with side shields worn with a face shield to prevent liquid splash contact.

SKIN PROTECTION:

When chemical contact is possible, wear butyl or other chemical resistant gloves, splash apron, and shoes or coverlets.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Clear liquid

MELTING POINT/ FREEZING POINT: <-40° C

BOILING POINT: 167° C

FLASH POINT: 30° C

AUTO-IGNITION TEMPERATURE: 190° C

DENSITY: .816 g/ml

VAPOR PRESSURE: 1.15 torr @ 20° C

VAPOR DENSITY: >1

SOLUBILITY IN WATER: Reacts with water

ODOR: Fish-like odor.

EVAPORATION RATE: >1

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Extreme heat, moisture, and alcohol

INCOMPATIBILITY: Water, alcohols, acids, and oxidizing agents

DECOMPOSITION PRODUCTS: T-butylamine, a hydrolysis and a thermal decomposition product is highly flammable and highly toxic. Other thermal decomposition products, in the presence of air, are isobutylene, ammonia, nitrogen oxides, carbon monoxide, carbon dioxide, and silicon dioxide.

SECTION 11 TOXICOLOGICAL DATA

Harmful by inhalation, ingestion and skin absorption. CORROSIVE, may cause burns to the eyes, skin, and mucous membranes. Inhalation may be fatal as a result of spasm, inflammation, and swelling of the throat, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, difficulty in breathing, headache, nausea, and vomiting.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12 ECOLOGICAL DATA

Product will rapidly decompose to t-butylamine with the reaction with water and atmosphere.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all professional waste disposal service to dispose of this material. Dispose any contaminated packaging as unused product.

SECTION 14 TRANSPORTATION DATA

Flammable liquid, corrosive n.o.s. (Bis(tert-butylamino)silane)

Class 3 (8)

UN2924

PG II

DOT IATA and IMDG Regulated

Marine Pollutant: No

SECTION 15 REGULATORY INFORMATION

OSHA HAZARDS:

Listed in the Hazard Communication Standard (29 CFR 1910.1200)

TSCA STATUS:

Not listed in the TSCA

SARA 311/312 HAZARDS:

Acute, fire reactive

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Wonik Materials North America makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

DATE PREPARED: 06/11

SDS DEPT